

US EPA ARCHIVE DOCUMENT

EXECUTIVE SUMMARY

The Fairmont Coke Works Site in Fairmont, Marion County, West Virginia is the first Superfund site accepted into the Environmental Protection Agency's Project XL Program. Project XL (eXcellence and Leadership) is a national initiative that tests innovative ways of achieving better and more cost-effective public health and environmental protection. The information and lessons learned from this XL Project will be used to assist EPA in redesigning its current regulatory and policy-setting approaches for Superfund cleanups. This Final Project Agreement (FPA) documents all parties' intentions concerning Project XL for the Fairmont Coke Works Site.

It is being proposed that changes from the traditional Superfund process be made in (a) the regulatory approach used to characterize and cleanup the site, (b) risk assessment, (c) the management of onsite landfills (designation of an "Area of Contamination"), (d) mitigation requirements for EPA-created wetlands onsite, (e) the commercial/industrial redevelopment of the site, (f) the stakeholder/community involvement process, (g) the reduction of paperwork, (h) quality assurance, and (i) the support of regulatory involvement. Mechanisms for the implementation of these proposed changes, which represent the regulatory flexibilities being requested, are also presented.

An overview is also provided of the environmental benefits potentially gained from instituting the proposed changes. Specifically, the extent to which this project fulfills the eight XL criteria is discussed. It is anticipated that as an outcome of Project XL, cleanup of the Site will occur on an expedited basis with significant involvement of stakeholders such as the Fairmont community, resulting in an earlier mitigation of potential risk to human health and the environment and the return of the property to productive reuse.

1.0 PARTIES

The Parties to this Final Project Agreement (FPA) are the United States Environmental Protection Agency (hereafter EPA), the State of West Virginia represented by the West Virginia Division of Environmental Protection (hereafter WVDEP), the Fairmont Community Liaison Panel (hereafter FCLP) and Exxon Company USA (hereafter Exxon).

2.0 OVERVIEW

2.1 PURPOSE OF PROJECT XL

Project XL, which stands for “eXcellence and Leadership,” is a national pilot program to test the extent to which regulatory flexibilities and other innovative environmental approaches can be used to achieve superior environmental performance and reduced economic and administrative burden. Through site-specific agreements with project sponsors, EPA seeks to obtain data and project experience that will help the Agency redesign current approaches to public health and environmental protection. Under Project XL, sponsors, such as private facilities, multiple facilities, industry sectors, Federal facilities, communities and states, can implement innovative strategies that result in superior environmental performance; provide regulatory flexibilities, cost savings, paperwork reduction and other benefits to sponsors; and promote a greater accountability to stakeholders.

2.2 PURPOSE OF THE FINAL PROJECT AGREEMENT

This FPA is intended to be a joint statement of the plans and intentions of EPA, WVDEP, FCLP and Exxon (collectively "the Parties") and to reflect the commitments of each party with regard to the XL project approved for implementation at the Fairmont Coke Works Site (Site) in Fairmont, Marion County, West Virginia. This FPA is not,

however, intended to create or limit legal rights or obligations and is not an enforceable contract or a regulatory action such as a permit or rule. Nevertheless, some provisions of this FPA will be implemented through an Administrative Order by Consent for Removal Response Action (Docket No. III-99-004-DC) and will thereby be legally enforceable. The following Sections of the FPA will be legally enforceable under the Removal Order referenced above: Section 4.3.2 (Human Health Risk Assessment), Section 4.3.3 (Area of Contamination Concept), Section 4.3.4 (Flexibility for EPA Created Wetlands Mitigation), Section 4.3.5 (Redevelopment), Section 4.3.6 (Stakeholder Involvement), Section 4.3.8 (Quality Assurance), Section 4.4.2 (Area of Contamination Concept), Section 4.4.3 (Flexibility for EPA Created Wetlands Mitigation), Section 4.4.4 (Redevelopment), Section 4.4.5 (Stakeholder Involvement), Section 4.4.7 (Quality Assurance), and Section 5.8 (Reporting And Periodic Reviews).

This FPA demonstrates that, as contemplated by EPA's Project XL criteria, Exxon intends to continue to attain environmental results that are measurably superior when compared to current and reasonably anticipated regulatory standards and procedures. This FPA will identify the means to provide for regulatory flexibilities as requested by Exxon as an incentive and means to achieve superior environmental results. All parties of this FPA will strive for a high level of cooperation, communication and coordination to assure a successful, effective and efficient administration of the FPA and the Project.

3.0 STAKEHOLDER PROCESS

3.1 PROCESS FOR FPA DEVELOPMENT AND STAKEHOLDER INVOLVEMENT

Stakeholder involvement is considered essential for the success of this XL project. Exxon committed considerable resources early on in the XL process toward seeking out and obtaining the input and support of parties who have a stake in the environmental

impacts of the project. Exxon began formulating a stakeholder involvement process in December 1997 to aid in development of the initial XL Proposal and for use in developing the FPA. A more detailed description of the steps taken by Exxon to secure stakeholder involvement in this project is provided in Section 4.4.5 and Appendix I, Section 3.0.

The relevant stakeholders for this project include Exxon, EPA, WVDEP and the FCLP. The direct participants of the FCLP are provided in Appendix II. Exxon has kept the FCLP apprised of all developments and progress at the Site through a series of monthly meetings held in Fairmont, WV beginning with the first FCLP meeting on June 30, 1998. At the October 1, 1998 meeting a representative of EPA's Office of Reinvention presented an overview of Project XL to the FCLP.

4.0 DESCRIPTION OF XL PROJECT

4.1 BACKGROUND

The Site is located in Fairmont, Marion County, West Virginia. As illustrated in Figure 1, Fairmont, WV sits along the I-79 industrial corridor, approximately 20 miles south of Morgantown, WV and 20 miles north of Clarksburg, WV. The Site is one of the few large areas (approximately 50 acres) of flat, developable industrial land along I-79 in this area of West Virginia. A corporate predecessor of Exxon owned the Site from 1918 to 1948. Sharon Steel Corporation bought the Site in 1948 and operated a coke production facility there until 1979, when operations ceased due to the company's inability to comply with the Clean Air Act ("CAA") and Clean Water ("CWA") Act regulations. Sharon Steel filed for protection under federal bankruptcy laws in 1987. The Site is currently inactive.

EPA began evaluating the Site for inclusion on the National Priorities List (NPL) in 1987 and performed extensive interim removal actions in 1993 to 1996. The Site was listed on the NPL on December 23, 1996. EPA then began the process of looking for potentially responsible parties (PRPs) to perform various investigation and remediation tasks at this Site. Because of Sharon Steel's bankruptcy and Exxon's prior ownership, in September 1997, Exxon signed a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") Administrative Order on Consent with EPA to conduct a Remedial Investigation/Feasibility Study, and Risk Assessment for the Site (RI/FS Order). Exxon and EPA subsequently negotiated an Engineering Evaluation/Cost Analysis Order (EE/CA Order) for the Site to temporarily replace the RI/FS Order, which was executed by Exxon and EPA on December 11, 1998 (see Section 4.4.1, below, for details on components of the EE/CA). Currently, Exxon is the only PRP that has agreed to perform work at this Site. It should be noted that, although not required by the EE/CA Guidance, an Ecological Risk Assessment is being conducted in accordance with provisions in the EE/CA Order.

4.2 CURRENT SUPERFUND PROCESS

The traditional remedial approach to an NPL site starts with a Remedial Investigation (RI) to characterize the nature and extent of the contamination. As part of the RI, a Risk Assessment (RA) is performed using the data obtained in the RI to determine the baseline risk to appropriate receptors (human and environmental) posed by the observed contaminants at the site. Next, a Feasibility Study (FS) is conducted to establish remedial action objectives, identify and screen remedial alternatives and evaluate these alternatives in detail. Then the remedy is selected, in consultation with the appropriate State agency, and documented in a Record of Decision (ROD). If the remedy is to be implemented by responsible parties, a Consent Decree is then negotiated, signed by the government and the responsible parties, and entered by the District Court.

If the remedy is not going to be implemented by responsible parties, then EPA implements the selected remedy using Federal funding (the Superfund).

To clean up the site, the responsible parties, or the EPA, design the remedy selected in the ROD and implement it. Generally, the experience of the Superfund program has been that it takes from seven to ten years from listing on the NPL to construction completion using the remedial process.

To date the State of West Virginia has had seven sites listed on the NPL. One West Virginia NPL Site, Leetown Pesticides, was listed on the NPL in 1983 and was deleted from the NPL in 1996. The following five sites: Fike Chemical (listed in 1983), Follansbee (listed in 1983), West Virginia Ordnance Works (listed in 1983), Allegheny Ballistics Laboratory (listed in 1994) and Morgantown Ordnance Works (listed in 1986) are all in various stages of the CERCLA remedial process.

Authorities and responses associated with the Superfund removal program generally allow for faster response actions at sites.

4.3 SCOPE OF PROPOSED CHANGES

4.3.1 Integration of Remedial and Non-Time Critical Removal Action Approaches

In this case, Exxon plans to use both the remedial process and the removal process in a coordinated manner to reduce the time involved in cleaning up the Site. Exxon will conduct a non-time critical (“NTC”) removal action to address the onsite former process areas, waste management units, and tributaries. Other issues that may remain at the site (such as groundwater contamination) are expected to be addressed by the remedial process.

The NTC removal process involves an Engineering Evaluation/Cost Analysis (“EE/CA”), including human health and ecological risk assessments. Following the EE/CA and public involvement, the NTC removal action will be selected in an Action Memorandum. As part of the Administrative Order on Consent for the conduct of the EE/CA Order executed on December 11, 1998, Exxon has agreed to implement the NTC Removal Action to be selected in an Action Memorandum. EPA site managers have estimated that this use of a NTC removal action will reduce the overall time for cleanup. Remaining issues, if any, at the Site after the NTC removal are expected to be addressed through a remedial action. However, it is anticipated that any Remedial Action will be focused such that it can be completed in significantly less time. To the extent practicable, the non-time critical removal action will be consistent with and contribute to the efficient performance of any long-term remedial action at this Site.

4.3.2 Human Health Risk Assessment

A baseline human health risk assessment will be conducted as a required part of the Engineering Evaluation/Cost Analysis (see Section 4.4.1 below). Human health risk assessments conducted as part of Superfund programs have generally included an evaluation of the potential risk associated with residential exposure scenarios, unless the likely future use of the site is industrial/commercial, in which case an industrial/commercial exposure scenario is used. The assessment of the potential risk associated with the direct contact exposure of onsite receptors to contamination observed at this Site will be limited to commercial/industrial exposure scenarios. This limitation is appropriate since Exxon has ownership of the property and intends to limit the redevelopment of the Site to commercial/industrial uses through a deed restriction.

The acceptable carcinogenic risk range for remedial actions at Superfund sites identified by the 1990 National Oil and Hazardous Substances Pollution Contingency

Plan (NCP) (40 C.F.R. § 300.430(e)(2)(i)(A)(2)) ranges from 10^{-4} to 10^{-6} depending on site specific factors. Based on such factors at the Fairmont Coke Works Site, which include: (a) the current and anticipated zoning of the property; (b) the redevelopment strategy that Exxon has proposed; (c) the expected future use of the property (i.e., commercial/industrial); and (d) the anticipated low probability of exposures of receptors to residual contamination, if any, at the Site (i.e., incomplete exposure pathways), the 10^{-4} risk level shall be used as: (1) the target risk level for determining the need for removal/remedial action, and (2) the preliminary remediation goal (PRG). This is consistent with EPA's goal to reduce the threat from carcinogenic contaminants such that the excess risk of cancer to an individual exposed over a lifetime generally falls within a range of 10^{-4} to 10^{-6} (i.e., an exposed individual will have an estimated upperbound excess probability of developing cancer of one in ten thousand (1×10^{-4}) or one in one million (1×10^{-6})).

These PRGs may be modified as more information becomes available based on sound scientific considerations and/or the given waste management strategy selected at the time of selection of the response action. The final remediation goals (i.e., media-specific cleanup levels) for the Site will be determined when the response action is selected. EPA will consider the criteria identified in Section 2.6 of the EE/CA guidance (EPA 540-R-93-057) in determining the appropriate level of protection when conducting the comparative analysis of removal alternatives. The media-specific cleanup levels will be set forth in the Action Memorandum(s) and the Record of Decision.

Alternative published toxicity and site-specific exposure data/criteria are expected to be used in the risk assessment instead of default parameter values, provided that the sources of these data are acceptable to EPA and WVDEP. Emphasis should be placed on the use of site-specific factors in the risk assessment.

4.3.3 Area of Contamination Concept

The Area of Contamination (“AOC”) concept was introduced in the preamble to the 1990 NCP as a tool for the management of remediation waste. EPA guidance on AOCs states that “[a]n AOC is delineated by the areal extent (or boundary) of contiguous contamination.” Determining When Land Disposal Restrictions (LDRs) Are Applicable to CERCLA Response Actions, OSWER Directive 9347.3-05FS (July 1989) further states that the types and concentrations of the contamination may vary within the AOC. One of the examples provided in the OSWER Directive for an AOC is “[a] waste source (e.g. waste pit, landfill, waste pile) and the surrounding contaminated soil.” In the preamble to the 1990 NCP, EPA refers to an AOC as “continuous contamination of varying amounts and types,” and suggests that an AOC could be defined as a “non-discrete land area on or in which there is generally dispersed contamination, as opposed to discrete, widely separated areas of contamination.” (55 Fed. Reg. 8758)

The northern area of the Site, as delineated on Figure 2, which encompasses all of the waste management units at the Site, is expected to be designated a single AOC. This designation is justified due to the close proximity of the landfills, waste sludge areas and impoundment, and the dispersed nature of the contamination in these parcels. Management of the wastes present in this area could then proceed in a safe, regulatory compliant and more efficient manner without triggering RCRA land disposal restrictions (“LDRs”).

4.3.4 Flexibility for EPA Created Wetlands Mitigation

It is recognized that some on-site wetland areas were formed as a result of site grading/contouring that occurred during EPA's interim removal actions. A decision process has been identified which will allow for evaluation of a map to be created by

Exxon identifying EPA-created wetland areas, followed by flexible mitigation requirements for those EPA-created wetlands as specified in Section 4.4.3.

4.3.5 Redevelopment

The Fairmont community has expressed considerable interest in the redevelopment of the Site. Due to its location relative to major roadways, rail, and the Monongahela River, combined with the level grade of the property, the Site is ideally suited for industrial/commercial reuse. In fact, a report prepared for the Planning Commission of the City of Fairmont recognizes the Site as "an economic asset to Fairmont and Marion County" (Whitney, Bailey, Cox & Magnani, 1998).

Exxon will work with EPA, WVDEP and the community of Fairmont, beyond Exxon's statutory responsibility to cleanup the Site, to facilitate the productive reuse of the property. In order to facilitate the redevelopment process, Exxon has already purchased the Site. As the property owner, Exxon not only has control over Site access, but also has control over the preparation of the Site for redevelopment and the ultimate disposition of the Site. Where possible, Exxon will attempt to use local labor. A generic process that will be used by Exxon in facilitating site redevelopment is described in Section 4.4.4 below.

4.3.6 Stakeholder Involvement

The overarching goal of this XL project is to demonstrate that Superfund sites can be cleaned up quickly and incorporate plans for reuse of the Site if the key stakeholders collaboratively partner in the planning and implementation of the Site cleanup. To this end, Exxon, EPA, WVDEP, and the FCLP commit to work cooperatively together, to share information and responsibility, and to attempt in good faith to build a process geared toward achieving a consensus among the Parties on all major aspects of the

response.

Stakeholder involvement is essential for the success of this project and is a critical component of all XL projects. Exxon has committed considerable resources toward seeking out and obtaining the input, involvement, and support of parties who have a stake in the environmental impacts of this project. Exxon, EPA, and WVDEP will work together and with the FCLP when planning for and implementing the response action(s). Innovative approaches for working together will also be explored to ensure that the flow of information to and from all interested parties occurs in a timely fashion.

4.3.7 Paperwork Reduction

One of the XL project criteria is to achieve a reduction in paperwork. Exxon will be exploring various electronic means for transferring data, communications and reports between itself, EPA, WVDEP and the FCLP/Fairmont community. Such efforts will result in:

- Elimination of multiple copies of draft reports circulated for review
- Elimination of unnecessary hard copies of data and/or reports that are alternatively acceptable in electronic form; and
- Expedited transfer of documents, data and information among all involved parties

4.3.8 Quality Assurance

EPA Region III policy requires one hundred percent data validation in accordance with U.S. EPA Region III Modifications to the National Functional Guidelines for Evaluating Organic and Inorganic Analyses (Functional Guidelines) for all data that will be used for risk assessment purposes. Exxon has been conducting a Data Usability Assessment (DUA) on all samples submitted for Target Analyte List (“TAL”)/Target Compound List (“TCL”) analysis for the Site, in addition to data validation of 50% of all sample delivery groups (SDGs) according to Region III Modifications to the *National Functional Guidelines for Organic Data Review* (September 1994) and Region III

Modifications to the *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analysis* (February 1994). This assessment assures or determines that the quality of the data being generated meets the intended use, and is performed, for the most part, in accordance with criteria defined in the Functional Guidelines. During development of the Quality Assurance Project Plan (“QAPP”) for the EE/CA, EPA agreed to allow the use of Exxon’s DUA for the overall qualitative evaluation of the data because EPA agrees that the qualitative data evaluation provided by the DUA is equivalent to the Functional Guidelines.

EPA, WVDEP and Exxon have agreed that verification or recalculation of laboratory reported concentrations will be conducted for ten of twenty samples per parameter per SDG for all EE/CA data. The specific differences between EPA Region III's Data Validation Policy and the Exxon’s proposed DUA are outlined in Appendix IV.

4.3.9 Support of WVDEP Involvement

Early on in the Project XL process, it was realized that the State requirement to seek federal funding, cost reimbursement through civil action, or enter into cooperative agreements to fund the States cost or potential cost incurred as the result of CERCLA activities would delay the environmental restoration of the Site. Therefore, Exxon and WVDEP executed an agreement which establishes a mechanism to directly fund WVDEP’s involvement during the scope of the project. Direct funding will reduce the state’s administrative burden and provide increased flexibility for State involvement in Project XL.

4.4 IMPLEMENTATION OF PROPOSED CHANGES

4.4.1 Non-Time Critical Removal Action Approach

Exxon proposed an alternative, streamlined, cost-effective strategy for the investigation, risk assessment, response action selection and implementation of the response action at the Site. In support of these goals, it was recommended that the non-time critical removal action framework available under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the NCP be used. With WVDEP concurrence, EPA approved Exxon's proposal to conduct a non-time critical removal action at the Site. EPA and Exxon subsequently entered into an Administrative Order by Consent for Removal Response Action (Docket No. III-99-004-DC) on December 11, 1998 (EE/CA Order).

CERCLA and the NCP define removal actions to include "the cleanup or removal of released hazardous substances from the environment, such actions as may necessarily be taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release." The EPA has defined non-time critical removal actions as those requiring an action that can start later than 6 months after the determination that a response is necessary.

Non-time critical removal actions can be the appropriate response for a variety of sites from small scale, low cost actions to complicated multi-media response actions. In addition, non-time critical removal actions may be interim or final actions. They may be the first and only action at a site, or one of a series of planned response actions.

The environmental investigations conducted by Sharon Steel Corporation, the EPA

Environmental Response Team, and the EPA Region III Superfund Removal Branch have provided a significant amount of data for characterizing the extent and nature of contamination at the Site.

Expanded Site Investigation. An Expanded Site Investigation (ESI) is being conducted by Exxon to obtain additional data on the nature and extent of contamination potentially present at the Site. Details of the studies being performed are contained in an ESI Work Plan (ESIWP) which has been submitted to and approved by the EPA (ICF Kaiser Engineers, Inc., 1998). The ESIWP and associated documents fulfilled the requirements of the Remedial Investigation Work Plan submittal(s) under the Administrative Order on Consent signed on September 18, 1997 (the RI/FS Order). The information obtained in the ESI will serve as the basis for determining the need for and selection of response alternatives.

Engineering Evaluation/Cost Analysis. Following issuance of an approval memorandum (November 12, 1998), an Engineering Evaluation/Cost Analysis (EE/CA) is being conducted in accordance with the EE/CA Order. The goals of an EE/CA are:

- To identify the objectives of the non-time critical removal action(s). The objectives typically consist of environmental medium-specific risk-based goals for protecting human health and/or the environment
- To determine the scope of the removal action
- To analyze the effectiveness, implementability and cost of the various alternatives in meeting the stated objectives

The EE/CA is a flexible document tailored to the scope, goals, and objectives of the non-time critical removal action. The detail of the EE/CA is determined by the anticipated scope of the non-time critical removal action. The EE/CA contains only those data necessary to support the selection of a response alternative, and relies upon existing documentation whenever possible.

The available data on the physical, demographic and other characteristics of the Site and surrounding areas will be summarized in the site characterization section of the EE/CA. Both historical and current information on the Site will be included. All previous removal actions conducted at the Site will also be summarized in this section, as well as descriptions of the source, nature and extent of contamination.

The risk evaluation conducted as part of the EE/CA will be intermediate in scope between the limited risk evaluation undertaken for emergency removal actions and the conventional baseline risk assessment normally conducted for remedial actions. The objectives of this streamlined risk assessment are:

- Identify chemicals of potential concern (COPCs)
- Provide an estimate of how and to what extent receptors might be exposed to the COPCs based on continued commercial/industrial land use
- Assess the potential risk to human health and/or the environment associated with the COPCs existing at the site, if any
- Determine the necessity of a removal action
- Define appropriate cleanup levels

Based on an analysis of the nature and extent of contamination, the results of the streamlined risk assessment, and the cleanup objectives, a limited number of removal action alternatives will be identified. The use of presumptive remedy guidance can provide an immediate focus to the discussion and selection of alternatives, speeding the process by limiting the universe of effective alternatives for the non-time critical removal action. The identified alternatives will be evaluated against the short- and long-term aspects of three broad criteria: effectiveness, implementability, and cost. Once the alternatives have been documented and assessed against these criteria, a comparative analysis will be conducted to identify the advantages and disadvantages of each alternative relative to one another. The removal action that best satisfies the evaluation

criteria based on the comparative analysis will then be selected.

EE/CA Report. Exxon will prepare an EE/CA report summarizing (a) the site characterization data, (b) the risk assessment, (c) the identification of removal action objectives, (d) the identification and analysis of removal action alternatives, (e) the comparative analysis of the removal action alternatives, and (f) the recommended removal action alternative(s). Following EPA and WVDEP review, this report will be placed in the information repository for public comment. Notice of its availability will be placed in local newspapers.

Action Memorandum. The Action Memorandum is the decision document which substantiates the need for a removal action, identifies the proposed action, and summarizes the rationale for the removal action selected. In this respect, the Action Memorandum for removal action parallels the function of the Record of Decision (ROD) in traditional remedial actions.

Removal Actions. Various emergency removal actions were conducted at the Site by the EPA Region III Removal Program from May 1993 to August 1996 (Roy F. Weston, Inc., 1996). Contamination and/or sources of potential contamination which posed the most immediate threats to human health and/or the environment were addressed during these removal actions. In addition, information useful in discerning the nature and extent of contamination at the Site was obtained. Implementation of any additional non-time critical removal action(s) required based on the findings of the EE/CA will occur following issuance of the Action Memorandum. Additional non-time critical removal actions relevant to the Site could include:

- Prevention or abatement of potential exposure of human receptors to contaminants in surficial soils and surface water

- Actions to address potential contaminants in surficial soils that may migrate
- Prevention or abatement of potential impacts to relevant ecological receptors of concern
- Stabilization of wastes in the landfill areas which may pose a threat of release
- Stabilization or elimination of hazardous substances in drums, barrels, tanks or other storage containers/equipment within the site structures which may pose a threat of release
- Demolition of site structures which pose a physical hazard
- Removal of friable asbestos contained in building materials

Removal Closeout and Post-Removal Site Controls. Upon completion of the removal action(s), closeout of the removal action including any necessary post-removal site control(s) will be performed. The issuance of the EE/CA Order on December 11, 1998 temporarily suspends the RI/FS Order dated September 17, 1997. At the removal closeout/post-removal site controls stage, it is envisioned that the RI/FS Order will be reactivated and any remaining RI/FS activities will be implemented. A ROD will be developed based on the Site conditions following completion of the non-time critical removal action(s). A Consent Decree would be negotiated for implementation of any remaining remedial activities specified in the ROD. Following completion of any additional remedies specified in the ROD, closeout of the site will occur.

4.4.2 Area of Contamination Concept (AOC)

The AOC concept arises out of EPA's interpretation of the definition of "land disposal" and the fact that "land disposal" triggers RCRA land disposal restrictions (LDRs). EPA's Office of Solid Waste and Emergency Response ("OSWER") Directive (July 1986) delineates some of the activities that constitute and do not constitute land disposal or "placement".

Not "Placement"

- Treatment of waste *in situ* (in place)
- Capping of waste in place

- Consolidation of wastes located within an AOC
- Processing of waste within the AOC (but not in a separate unit such as a tank) to improve its structural stability

"Placement"

- Consolidation of wastes from different AOCs into a single AOC
- Movement of waste outside of an AOC followed by return of the waste to the same or different AOC
- Excavation of waste from an AOC, followed by placement into a separate unit (such as an incinerator or tank within the AOC) and redispotion to the same AOC

The northern area of the Site, as delineated on Figure 2, which encompasses all of the waste management units at the Site, is expected to be designated a single AOC and that all waste can be managed in and between these parcels without being construed as “placement” and without invoking LDRs.

4.4.3 Flexibility for EPA Created Wetlands Mitigation

A wetland determination was conducted as part of the ESI to identify and delineate potential wetland areas on the Site. The wetland survey was conducted using the methodologies described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (U.S. Army Corps of Engineers, 1987). It is recognized that some onsite wetland areas (e.g., drainage channels) were formed as a result of Site grading/contouring that occurred during EPA's interim removal actions (May 1993 - August 1996). Exxon will prepare a map that identifies the potential wetland areas that were created by EPA removal actions; the determination that these wetlands were created by EPA is subject to EPA approval.

EPA will evaluate the mapped wetland areas using the following decision process:

1. If any of these areas are part of existing treatment or drainage systems, no mitigation will be required.
2. If, in the process of the anticipated Site remediation (e.g., landfill capping), such areas would be improved due to grading and/or drainage reconstruction/upgrade, such grading and/or drainage reconstruction/upgrade may be considered mitigation.
3. Wetlands identified as being created during the 1993-1996 EPA removal action that do not meet the criteria listed in 1 and 2 above, will be evaluated on a case-by-case basis to determine if mitigation will be required.

4.4.4 Redevelopment

As a first step of Exxon's commitment to facilitate redevelopment of the Site, an extensive building demolition program is being undertaken at the Site. Onsite building demolition is typically required at Superfund sites only where it has been demonstrated that hazardous substances are or have the potential to migrate from such buildings. Exxon is implementing a sitewide demolition plan, regardless of the presence (or lack thereof) of hazardous substances associated with the onsite buildings. Exxon intends to manage all demolition debris in accordance with the requirements of all applicable and/or relevant and appropriate local, state and federal laws and regulations. In addition to the redevelopment benefits, the demolition program will result in an immediate improvement in the overall aesthetics of the Site to the Fairmont community.

Exxon has already begun the demolition process and is near completion of Phases one and two of the demolition plan. These Phases include: dismantling the smoke stack; dismantling the coke ovens; removing all asbestos material; and properly disposing of

construction debris off-site. Furthermore, all subsurface structures (e.g., basement sumps) present in the coal and coke handling area will be demolished to one foot below grade. Demolition debris is being segregated to recycle salvageable material such as steel. Brick and concrete debris are currently being stockpiled for future disposition. Phase 3 will follow and includes demolition of all process buildings.

All reasonable steps will be taken by Exxon to facilitate the industrial/commercial reuse of the property. Such steps include, but are not necessarily limited to:

- Engaging the services of redevelopment consultants and companies to determine how best to make the Site most amenable to redevelopment and to determine how to best to market the Site;
- Working with local and state redevelopment agencies (e.g., Fairmont Industrial Credit Corporation (which works in conjunction with the Marion County Chamber of Commerce) and West Virginia Development Office) in identifying potential redevelopment options and developers;
- Securing the opinion of the Fairmont community on redevelopment options for the site;
- Instituting improvements to the Site and area infrastructure, to be determined by Exxon on a case-by-case basis, in order to help make the Site amenable for development; and
- Conducting the building demolition program in a manner consistent with the intent to bring the property to a condition amendable to industrial/commercial reuse.

Although various details still need to be resolved, the general approach that Exxon will use to facilitate the redevelopment of the Site is illustrated in Figure 3. The goal is to devise a generic approach to this redevelopment strategy in order to make the Site attractive to the widest number of possible users. A brief description of each of the steps in this approach follows:

Potential for Redevelopment Assessment - The first stage consists of a Potential for Redevelopment Site Assessment to determine the physical characteristics of the Site

relative to the potential for redeveloping the Site, such as (a) the capacity of the Site to support commercial/industrial development, (b) subsoil characteristics (e.g., load bearing capacity), (c) the anticipated condition of the Site following demolition activities and any response actions and (d) recommended upgrades to the Site. An engineering analysis of the Site infrastructure also will be conducted to examine utilities available at the property boundary, available services and access to the Site (e.g., transportation, roads, rail, waterways, etc.) and recommended upgrades to the infrastructure to improve its development potential.

Environmental Assessment. The environmental assessment summarizes the contamination at the Site and what contamination will remain after implementation of response actions. The impact of institutional controls and/or deed restrictions on the redevelopment of the Site will also be studied. Any necessary restrictions or precautions on construction and excavation activities will be identified.

Real Estate Market Overview. The history of, and available technical data on the Site will be compiled, such that it can be made available to prospective redevelopers. Other factors that will be examined are the regional need for land, market value of land, and the availability and quality of the work force.

Identify Market Options: Legal, regulatory and/or political factors which could constrain or enhance the redevelopment of the Site will be examined and identified.

Real Estate Market Analysis: All information obtained in the previous four steps are integrated into a final report in this step to identify the range of potential uses of the Site, such that it can be made available to prospective redevelopers. Environmental, Site, regulatory, legal and/or political factors, and public opinion will determine the range of

possible outcomes.

Financial Analysis: Estimates of the potential value of the Site will be developed in the financial analysis. These estimates will depend on whether redevelopment interest in the Site exists in either the public or private market sector or both.

An estimate of the potential economic value of the commercial/industrial reuse of the Site to the Fairmont community and region will also be obtained.

Development of Disposition Plan: Based on all the previous steps undertaken in this redevelopment plan, a disposition plan can be prepared that outlines the strategy for facilitating the redevelopment of the Site beyond the assessment and planning stages.

4.4.5 Stakeholder Involvement

The involvement and support of parties that have a stake in the environmental and economic outcomes of a project are important factors in XL projects. Exxon has already demonstrated its commitment to enhanced stakeholder participation through its early community interviews, its initiative in helping to organize the FCLP, and its willingness to engage in collaborative dialogue with its partners, including the community. Exxon, EPA and WVDEP agree to go beyond the minimum Superfund community relations requirements in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and involve the community, through its representative (the FCLP) in the planning and implementation of the response action(s). Everyone agrees to work cooperatively together and to attempt in good faith to work toward building a consensus among the parties on all major aspects of the response action(s).

4.4.6 Paperwork Reduction

Draft copies of reports required under the EE/CA Order will be electronically transmitted to EPA and WVDEP for review. A single "red-lined" version of a draft report indicating all changes made by the reviewers will be maintained until agreement is reached that all modifications are acceptable to all reviewing Parties. Upon the completion of all modifications, a final report will be prepared and distributed to all Parties on a compact disk (CD), where appropriate, instead of hard-copied reports/documents.

In lieu of providing hard copies of all analytical data generated during the reporting period in the quarterly report, analytical data will be made available to EPA and WVDEP through Accutest Laboratories LabLink data management system. Accounts with passwords have been established for the EPA and WVDEP to access the LabLink data management system via the Internet using Microsoft Explorer or direct dial/modem. Information accessible using this system includes:

- Sample status information in real time, allowing tracking of the progress of the sample analysis
- Complete access to the laboratory approved test results
- Analytical results which can be downloaded in a format identical to the hard copy reports

4.4.7 Quality Assurance

Data usability is the process of assuring or determining that the quality of the data generated meets the intended use. The primary objective of the Data Usability Assessment (DUA) is to determine and quantify, where applicable, the uncertainty in the data such that the end user is aware of potential biases or false positives and false negatives in the analytical data. Qualifiers are applied to the data during the usability assessment process to flag these uncertainties.

In the DUA, Data Usability Assessment/Data Validation Worksheets will be used in conjunction with data summary tables generated directly from the project database to assess all samples submitted for TAL/TCL. Standard data qualifiers will be applied to the data based on the U.S. EPA Region III Modifications to the *National Functional Guidelines for Organic Data Review* (September 1994), the U.S. EPA Region III Modifications to the *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analysis* (February 1994), the project-specific Quality Assurance Project Plan (ICF Kaiser, 1998a), method specific criteria and sound technical judgment.

The DUA has been slightly modified to ensure EPA acceptance. The modified DUA includes the following eight steps:

1. Upload electronic data results into project database and generate data summary tables. Compare the electronic data results to the results reported on the Form I's to verify accuracy of the electronic data.
2. Review of data package completeness.
3. Review of quality control (QC) summary forms to determine if the QC requirements were met and to determine the effect of any non-compliance with QC requirements on the precision, accuracy, and sensitivity of the data.
4. Review of the overall data package to determine if contractual requirements were met (based on method requirements and data validation guidelines).
5. Within a Sample Delivery Group (SDG) of twenty samples, review of raw data associated with ten samples per parameter type (VOC, SVOCs, pesticides/PCBs, and metals) to verify that the sample results and quantitation limits were correctly calculated and reported.
6. Review of additional quality assurance/quality control (QA/QC) parameters (e.g., field duplicates, field blank contamination, and matrix interference) to determine technical usability of the data.
7. Apply standard data quality qualifiers (U, J, UJ, R) to the data, as appropriate.
8. Update the project database with the data quality qualifiers.

Steps 2 through 6 will involve an evaluation of the following QA/QC parameters to determine the technical usability of the data:

- Holding times to assess potential for degradation that could affect accuracy
- Method, field, trip and rinsate blank results to assess contamination for all compounds/analytes. Instrument blank results for inorganics to assess contamination and instrument performance problems that may result in false positive or false negative results.
- Matrix spike and matrix spike duplicate (MS/MSD) recoveries for organics, and MS and laboratory control sample (LCS) recoveries for inorganics to assess accuracy of the methods.
- Inorganic instrument calibrations and performance standards to assess accuracy and sensitivity.
- Surrogate spike recoveries for organics to assess extraction efficiency and the accuracy of the analysis.
- MS/MSD relative percent differences (RPDs) for organics, and sample and matrix duplicate RPDs for inorganics to assess precision of the method relative to the specific sample matrix.
- Field duplicate RPDs to assess precision of the method relative to field sampling techniques, the specific sample matrix, and representativeness of the sample to the area sampled.
- Matrix interference effects on inorganic analytes that may affect accuracy (false positives and negatives) using method QC results.
- Detection and quantitation limits to assess sensitivity as compared to data user needs.
- Determination of which set of analyses to use when multiple analyses for one sample have been submitted by the laboratory (e.g., due to dilutions, re-extractions, re-analyses).

This evaluation generally identifies any and all significant deficiencies in the data and provides information for the qualification and determination of the overall usability of the data. Furthermore, ten of twenty samples per data package per parameter type will be examined in detail (e.g., transcriptions, calculations, compound identification, etc.). If, during the DUA, technical or reporting issues are noted, a more in-depth review of the data will be performed.

The DUA reports will include a completed Data Usability Assessment Worksheet which will note all quality control outliers, their effects on the reported results, and determination of usability for each compound/analyte reported in each sample included in

the data package. An overall summary of data quality will be presented with the worksheets which defines data acceptability and/or problems with accuracy, precision, sensitivity, and representativeness of the results. Data summary tables in spreadsheet format that include the results and the qualifiers added during the DUA will be included in the reports.

4.4.8 Support of WVDEP Involvement

A Direct Funding Agreement between Exxon and the WVDEP was executed on October 8, 1998 for the Fairmont Coke Works site XL program. Under this agreement, Exxon agreed to reimburse the WVDEP for all direct and indirect costs related to CERCLA activities at the Site. The term of this agreement is five (5) years.

4.5 ENVIRONMENTAL BENEFIT

This project was selected as an XL Project because it has been designed to achieve environmental performance that is superior to what would necessarily have been achieved absent the XL Project. Exxon has developed a quantitative and qualitative estimate of the superior environmental performance expected to be achieved in this XL project versus the traditional Superfund approach (see Appendix I).

The areas in which superior environmental performance will be achieved are among the following:

- Focused consideration of economic redevelopment of the Superfund Site to demonstrate that early consideration of future beneficial uses is a desirable and practical aspect of a Superfund response and can assist in improving the economic health of the local community;
- Providing additional environmental benefits to the community that most Superfund projects do not typically provide, such as Exxon's commitment to demolish and properly dispose of all onsite buildings and structures for the aesthetic value to the community as well as facilitation of redevelopment of the property;

- A commitment from Exxon to seek interested developers for redevelopment of the property and to make the Site available to such developers or a redevelopment agency;
- Early local government involvement in the XL project to provide for future land use planning activities and the identification of potential land use determinations;
- Significantly enhanced community participation in the cleanup process through the FCLP that provides citizen input into the anticipated future use of the Site, facilitates timely information dissemination on the extent of Site contamination, monitors the status of its cleanup, and provides community input into response action selections;
- A reduction in the administrative burden as a result of a more focused site characterization, streamlined risk assessment process and use of electronic document/data submittals;
- Through the dedication and partnering of the parties and stakeholders involved in the cleanup as a result of the Project XL pilot -- a faster, more efficient cleanup of the Site will be accomplished;
- As a direct result of the expedited cleanup, control and management measures will be implemented sooner to mitigate the extent of any potential migration of contamination;
- Reduction/elimination of potential risk to human health and/or the environment will be achieved in a shorter time frame due to the reduced cleanup time.

5.0 FINAL PROJECT AGREEMENT IMPLEMENTATION

5.1 Significance of Agreement

The implementation of Project XL at the Fairmont Coke Works site will provide for regulatory and policy flexibilities in the cleanup of the Site while achieving an environmental performance superior to the current Superfund process. This agreement documents the flexibilities being requested by Exxon, as well as, the superior environmental performance that is expected to be achieved upon successful completion of this project. In addition to the benefits gained with regards to the cleanup of the Site, this project has the potential of providing economic benefit to the Fairmont community and lessons that are transferable to other Superfund projects.

5.2 Enforceability

The FPA is not enforceable on its own. To implement this Project, the Parties intend to execute an amendment to the Administrative Order by Consent for Removal Response Action (“EE/CA Order”) EPA Docket No. III-99-004-DC, executed on December 11, 1998, that will incorporate the requirements of this FPA which the Parties expect to be enforceable.

5.3 Duration of Agreement

Unless it is terminated earlier, this FPA will be in effect during the time necessary to complete the requirements of the EE/CA Order. This time period will hereinafter be referred to as “the Minimum Project Term”. At least 180 days prior to the end of the minimum project term, Exxon may apply for an extension of the project period as provided in Section 5.4.

5.4 Modification Of Agreement

The FPA may be modified by mutual agreement of all Parties at any time during the Minimum Project Term of the FPA. The parties recognize that certain modifications to the Project may necessitate modification of the EE/CA Order or may require development of new implementation mechanisms. In that case, EPA, WVDEP and Exxon expect to work together to identify and pursue any modifications or additions to the EE/CA Order required, in accordance with procedures applicable to the modification of the EE/CA Order. To the extent that the parties agree to make a material modification to the Project, appropriate notice of such modification, and an appropriate opportunity to participate in the process will be provided to stakeholders and interested parties.

In recognition that the Project is an experiment designed to test new approaches to environmental protection, and of the uncertain nature of the environmental benefits and

costs associated with the activities to be undertaken in this Project, the parties to this FPA agree to evaluate the appropriateness of a modification to the FPA according to the provisions set forth below.

1. In determining whether to modify the FPA in accordance with any modification proposal(s) submitted by any Party under this Section, the decision will be based upon the following:
 - (a) Whether the proposal meets the Project XL criteria in effect at the time
 - (b) The environmental benefits expected to be achieved by the proposal
 - (c) Other environmental benefits achieved as a result of other activities under the proposal
 - (d) Any net environmental impacts expected to occur as a result of the proposal
 - (e) Other relevant considerations agreed on by all Parties
2. All Parties to the FPA will meet within ninety (90) days following submission of any modification proposal (or within such shorter or longer period as the Parties may agree) to discuss the evaluation of the modification proposal. If, all Parties support the reopening of this FPA to incorporate the proposal, the parties will (subject to any required public comment) take steps necessary to amend the FPA. Concurrent with the amendment of this FPA, EPA and WVDEP will take steps consistent with Section 5.0 to implement the proposal.

5.5 Termination Of Agreement

Because this FPA is not a legally binding document, any party may withdraw from the FPA at any time. If parties do withdraw from the FPA, the provisions of the FPA enforceable through the EE/CA Order will remain enforceable until the EE/CA Order is modified or terminated and replaced with the reinstated RI/FS Order. However, it is the desire of the parties that this FPA should remain in effect through the expected Minimum Project Term, and during that time, be implemented as fully as possible. Although EPA retains its discretion to terminate the FPA at any time, it is the intent of the parties that this Project will not be terminated unilaterally during the expected Minimum Project Term of this FPA unless one of the conditions set forth below occurs:

1. Failure (taking into account its nature and duration) by any other Party to (a) comply with the provisions of the implementation mechanism(s) for this Project, or (b) act in accordance with the provisions of this FPA;
2. Discovery of the failure of any other Party to disclose material facts during development of the FPA;
3. Failure of the Project to provide superior environmental performance consistent with the expectations of this FPA;
4. Enactment or promulgation of any environmental, health or safety law or regulation after execution of the FPA which renders the Project legally, technically or economically impracticable;
5. Decision by a Party to reject the proposed assumption by a future owner or operator of the Site of Exxon's rights and obligations under the Project.

Unless the Parties determine consistent with the provisions of Section 5.4 of this FPA, that continuation of the Project past the Minimum Project Term is warranted, this

FPA will be terminated as of the end of the Minimum Project Term.

EPA and WVDEP do not intend to withdraw from the FPA based on non-compliance by Exxon with the implementation mechanism(s), unless such non-compliance constitutes a material failure to comply with the implementation mechanism(s), taking into account the nature and duration of the non-compliance. EPA and WVDEP retain their discretion to address any non-compliance through existing enforcement authorities available to the parties. As set forth in Section 5.9.1, Exxon retains all rights to defend against any such enforcement actions.

5.5.1 Termination Procedures

The parties agree that the following procedures will be used to terminate the project prior to the minimum project term, and further that the implementation mechanism(s) will provide for withdrawal or termination consistent with these procedures;

- (1) Any party desiring to terminate this FPA is expected to provide written notice of its intent to terminate to the other parties at least sixty (60) days prior to termination.
- (2) If requested by any one party during the sixty (60) day period, the dispute resolution proceeding provided in Section 5.6 below may be initiated to resolve any dispute relating to the intent to terminate. If, following any dispute resolution or informal discussion, the party still desires to terminate, the terminating party will provide written notice of final termination to all other parties to the FPA.

- (3) If any party terminates its participation in the FPA, the remaining parties will consult with Exxon to determine whether the FPA should be continued in a modified form consistent with applicable federal and state law or terminated.
- (4) The termination procedures set forth in this Section 5.5.1 apply to the decision to terminate participation in the FPA. Procedures to be used in modifying or rescinding the EE/CA order used to implement the Project will be governed by the terms of such EE/CA Order and applicable law.

5.5.2 Post-Project Compliance Period

In the event of termination based upon the end of the minimum project term, Exxon will achieve compliance with all applicable requirements by the end of the minimum project term. If the Project is modified in accordance with Section 5.4 to change the minimum project term, then Exxon will achieve compliance with all applicable requirements by the end of such modified project term. Exxon is expected to anticipate and plan for all activities necessary to come into compliance upon completion of the Project sufficiently in advance of the end of the Project term.

5.6 Dispute Resolution

If a dispute arises under this Agreement with respect to a Modification under Section 5.4 or Termination under Section 5.5.1, the procedures of this Section shall apply. All Parties to this Agreement shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level. If resolution cannot be achieved informally, the procedures of this Section shall be implemented to resolve a dispute.

Within thirty (30) days after any action which leads to or generates a dispute, the disputing Party shall submit to the other Parties a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing Party's position with respect to the dispute and the information the disputing Party is relying upon to support its position.

Prior to any Party's issuance of a written statement of dispute, the disputing Party shall engage the other Parties in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period, the Parties shall confer as many times as are necessary to discuss and attempt resolution of the dispute.

A Dispute Resolution Committee (DRC) will serve as a forum for resolution of disputes for which agreement has not been reached through informal dispute resolution. The Parties, including the FCLP, shall each designate one individual and an alternate to serve on the DRC. The EPA representative on the DRC will be the Hazardous Site Cleanup Division Director of EPA Region III. The State's representative on the DRC will be the Chief, Office of Environmental Remediation. Exxon's representative on the DRC will be the Technical Manager for Site Remediation. The FCLP shall designate one of its members to serve as the FCLP representative on the DRC. Written notice of any delegation of authority from the Party's designated representative on the DRC shall be provided to all other Parties.

Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision signed by all Parties. If the DRC is unable to unanimously resolve the dispute within the twenty-one (21) day period, the written statement of dispute shall be forwarded to a Senior

Executive Committee (SEC), as defined below, for resolution.

The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA's representative on the SEC will be the Regional Administrator of EPA Region III. The State's representative on the SEC will be the Director of the WVDEP. Exxon's representative on the SEC will be the New Jersey Area Manager.

The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a unanimous written decision signed by all Parties. If unanimous resolution of the dispute is not reached within twenty-one (21) days, the EPA Regional Administrator shall provide the other Parties with a written final decision setting forth resolution of the dispute. The FCLP representative on the DRC, WVDEP, and Exxon will be given the opportunity to review and comment on the Regional Administrator's written position at which time the Regional Administrator may reconsider EPA's position.

The pendency of any dispute under this Section shall not affect Exxon's responsibility for performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue to be completed in accordance with the applicable schedule.

When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Hazardous Site Cleanup Division Director for EPA

Region III requests, in writing, that work related to the dispute be stopped. The State may also request the EPA Hazardous Site Cleanup Division Director to order work stopped. To the extent possible, the Party seeking a work stoppage shall consult with the other Parties prior to initiating a work stoppage request. After stoppage of work, if a Party believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the Party may meet with the Party ordering a work stoppage to discuss the work stoppage. Following this meeting, and further consideration of the issues, the EPA Hazardous Site Cleanup Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the EPA Hazardous Site Cleanup Division Director may immediately be subjected to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of the Party requesting dispute resolution.

Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Section, Exxon shall incorporate the resolution and final determination into the appropriate plan, schedule or procedures.

Resolution of a dispute pursuant to this Section constitutes a final resolution to any dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of a dispute obtained pursuant to this Section.

5.7 Legal Basis for FPA Implementation

This FPA is not an agency "action" by the Agencies because this FPA does not create or limit legal rights or obligations and is not legally enforceable. No action or omission by any Party that is at variance with a provision or provisions of this FPA, or that is alleged to be at variance with a provision or provisions of this FPA, can serve as the basis for any claims for damages, compensation or other relief against any Party,

except as provided in the Administrative Order on Consent (EE/CA Order) implementing this FPA.

Because this FPA does not create binding legal requirements, EPA and Exxon have executed an Administrative Order by Consent for Removal Response Action, EPA Docket No. III-99-004-DC, and expect to amend that order to incorporate specific provisions of this FPA, as the implementation mechanism for Sections 4.3 and 4.4 of this FPA.

5.8 Reporting And Periodic Reviews

The reporting requirements and periodic reviews are those specified in Section VIII. of the EE/CA Order. It is the Parties intention that the EE/CA Order will be modified to include that reporting under Section VIII. J of the EE/CA Order. The quarterly reports will include a complete account of all Project XL related activities that have occurred in the previous quarter and those Project XL activities anticipated for the coming quarter. (Appendix 7, Summary of Proposed EE/CA Modification of Reporting Requirements)

5.9 Rights Retained and Project Transfer

5.9.1. Rights Retained

Except as expressly provided in the EE/CA Order, nothing in the FPA shall be construed to affect or limit either Exxon's legal rights or the Agencies' rights to seek legal, equitable, civil, criminal or administrative relief regarding the enforcement of present or future applicable federal and state code, rules, or regulations with respect to the Facility or Exxon.

5.9.2 Transfer of Project Benefits and Responsibilities

It is expected that the implementation mechanisms will allow for the transfer of Exxon's rights and obligations under the Project to any future owner or operator upon request of Exxon and such owner/operator, provided that the following conditions are met:

1. Exxon will provide written notice of any such proposed transfer to EPA and the parties at least ninety (90) days prior to the effective date of the transfer. The notice is expected to include identification of the proposed transferee, a description of the proposed transferee's financial and technical capability to assume the obligations associated with the Project, and a statement of the transferee's intention to sign the FPA as an additional party.
2. Within forty-five (45) days of receipt of the written notice, it is expected that the Agencies will determine whether the transferee has demonstrated adequate financial and technical capability to carry out the Project and a willingness to sign the FPA. It is expected that the implementation mechanisms will provide that, so long as the demonstration has been made to the satisfaction and unreviewable discretion of the Agencies, and upon consideration of other relevant factors, the FPA will be modified to allow the proposed transferee to assume the rights and obligations of Exxon (subject to consideration of public comment). In the event that transfer is disapproved by any agency, withdrawal or termination of the FPA may be initiated, as provided in Section 5.5.

SIGNATORIES

United States Environmental
Protection Agency

West Virginia Division of
Environmental Protection

Exxon

Fairmont Community Liaison Panel Direct Participants:

APPENDIX I

PROJECT XL ACCEPTANCE CRITERIA

The Fairmont XL Project proposed by Exxon fulfills the eight XL criteria for project selection. The relationship of the Project to each of the XL criteria is discussed in detail in the following sections.

1.0 Superior Environmental Performance

A two tiered assessment of superior environmental performance has been established for Project XL by the USEPA. Tier 1 establishes an environmental performance benchmark for an XL project. This benchmark provides a reasonable estimate of the impact to the environment absent Project XL, thus establishing a baseline against which the project's anticipated environmental performance can be compared. Tier 2 examines factors that are used to judge that a project will truly result in superior environmental performance.

1.1 Tier 1

If the traditional Superfund process were followed at the Fairmont Coke Works Site, the typical environmental performance benchmark would be:

- The average length of time to complete characterization and remediation of the Site is 7 to 10 years;
- The potential for migration of contaminants increases the longer it takes to identify and remediate onsite sources of contamination;
- If actual risks to human health and/or the environment currently exist, mitigation of such risks will take longer due to the longer period of time

- required for completion of the traditional Superfund process;
- Public involvement is generally limited to a review of and comment on the proposed remedial actions after the site assessment and risk assessment components have been completed;
- Onsite building demolition is typically required at Superfund sites only where it has been demonstrated that hazardous substances are or have the potential to migrate from such buildings;
- Commercial re-development of the Site is normally not addressed;
- Administrative burden is significant, time-consuming and costly (e.g., preparation of ROD and Consent Decree negotiations);
- Alternatives to the standard regulatory requirements are not explored; and
- Given the mature nature of the Superfund Program, few, if any, approaches/procedures used in the performance of a traditional Superfund project are useful from the standpoint of transferability of new learnings;

1.2 Tier 2

Tier 2 factors that describe the Superior Environmental Performance and are appropriate for application to the Fairmont Coke Works site are listed below.

- Focused consideration of economic redevelopment of the Superfund Site to demonstrate that early consideration of future beneficial uses is a desirable and practical aspect of a Superfund remedial response and can assist in raising the economic health of the local community;
- Providing additional environmental benefits to the community that most Superfund projects do not typically provide, such as Exxon's commitment to demolish and properly dispose of all onsite buildings and structures for the aesthetic value to the community as well as facilitation of reuse of the property;
- A commitment from Exxon to seek interested developers for redevelopment of the property and to make the Site available to such developers or a redevelopment agency;
- Early local government involvement in the XL project to provide for future land use planning activities and the identification of potential land use determinations;
- Significantly enhanced community participation in the cleanup process through the FCLP that provides citizen input into the anticipated future use of

the Site, obtains timely information on the extent of Site contamination, monitors the status of its cleanup, and provides community input into remedy selections;

- A reduction in the administrative burden as a result of a more focused site characterization, streamlined risk assessment and use of electronic document/data submittals;
- Through the dedication and partnering of the parties and stakeholders involved in the cleanup as a result of the Project XL pilot (as well as programmatic remediation mechanisms) -- a faster, more efficient cleanup of the Site will be accomplished;
- As a direct result of the expedited cleanup, control and management measures will be implemented sooner to mitigate the extent of any potential migration of contamination;
- Reduction/elimination of potential risk to human health and/or environment will be achieved in a shorter time frame due to the reduced cleanup time.

2.0 Cost Savings and Paperwork

The use of various technical and administrative aspects within CERCLA (i.e., ESI, EE/CA) will result in a reduction of time and paperwork, which in turn decreases project cost, USEPA and WVDEP oversight costs, and overall administrative burden. The amount of time necessary for review of documents will be significantly reduced by obtaining direct input from USEPA, the State and the community prior to finalizing a document; thus avoiding the preparation and review of numerous draft documents and providing an ultimate reduction in paperwork. This "team" approach being utilized by Exxon at the Site should also result in a reduction in oversight costs and administrative burden, by involving the regulators and community in the decision making process prior to the submittal of documents.

The performance of an ESI will facilitate the initiation of any required non-time critical removal action(s) under the EE/CA process. This approach focuses

on procedures aimed at obtaining only the data necessary to support the response alternative(s) for a given area(s). A significant reduction in paperwork and costs will also be achieved through the electronic submittal of data and the up front planning discussion with regulators and the community. It is Exxon's overall goal to utilize the electronic submittal of documents to reduce paperwork and costs.

It is anticipated that the preparation of the ROD and CD negotiations will proceed more rapidly than under the traditional Superfund process. Legal cost associated with the ROD and CD negotiations will also be reduced.

The demolition of Site structures proposed by Exxon in advance of the commercial re-development of the Site will ultimately result in cost savings to the potential future user of the property as well as the City of Fairmont. Demolition of site structures is not a routine component of the Superfund process. Thus, the demolition of the buildings/structures during the remediation of the Site will enhance an earlier return of this property to productive use, providing economic benefits to the area.

3.0 Stakeholder Involvement

Stakeholder involvement is considered essential for the success of this project. Exxon has committed considerable resources towards seeking out and obtaining the input and support of parties who have a stake in the environmental impacts of the project. Exxon has engaged and will continue to involve a wide range of stakeholders. The direct participant stakeholders which currently make up the Fairmont Community Liaison Panel (FCLP) were identified from the

following groups and categories: local environmental activists; educators; health care providers; emergency responders; local college students; homemakers and community volunteers; agriculture representatives; small business owners; senior citizens; members of the clergy; non-professional/hourly workers; local elected officials; city representatives; a representative from the Office of Congressman A. Mollohan; and the EPA and WVDEP regulatory agencies.

Exxon has considerable experience in the communications associated with environmental matters and stakeholder processes and will endeavor to conduct a highly effective communications program throughout this project. Through a series of community interviews, Exxon's communications consultant, Ann Green Communications, Inc., has concluded that the people of Fairmont generally read the Fairmont Times-West Virginia and/or the Morgantown Dominion-Post newspapers. WBOY-Clarksburg television station is said to provide good coverage of local issues. Civic groups can also provide a vehicle of communication and include two Rotary Clubs, several Lions Clubs, Kiwanis Club, Chamber of Commerce, and the Business and Professional Women's Association. Exxon will share its experience with others to facilitate improvements in industry performance. For example, all pertinent documents associated with the proposed XL project (e.g., work plans, approaches and technologies used, etc.) will be available on the Internet (www.ProjectXL\xl-home.nsf).

3.1 Pre-Proposal Activities

A broad cross section of EPA groups has been involved in pre-proposal scoping, including personnel from both Headquarters and Region III. EPA Headquarters personnel have included representatives from: Office of Policy,

Planning and Evaluation; Office of Site Remediation Enforcement; Office of Reinvention; Office of Emergency and Remedial Response; and Office of Solid Waste and Emergency Response. WVDEP has been represented through the Office of Environmental Remediation. Exxon believes that obtaining early input from these groups within the regulatory agencies will also ensure the feasibility of this effort under Project XL.

On November 12, 1997, Exxon presented the proposed Fairmont XL Project concept to EPA Region III and Headquarters personnel, including the Deputy Regional Administrator of Region III, who indicated they would support development of the proposal. On January 28, 1998, Exxon presented an update on the development of the proposal, including the status of the stakeholder process already initiated by Exxon, to EPA Region III and Headquarters, who again endorsed the proposal idea (with the understanding that Exxon would be specific in its written proposal about the type of regulatory alternatives, efficiencies sought, and environmental benefits to be achieved).

Exxon began formulating a stakeholder involvement process in December, 1997 to aid in development of the initial XL Proposal and for use in developing the Final Project Agreement (FPA). Exxon has retained the services of two West Virginia firms, Ann Green Communications, Inc. and McCabe-Henley Properties, LP, to develop and facilitate the stakeholder involvement process for the Site. Exxon's stakeholder involvement process includes three elements consistent with Project XL guidelines:

- (1) Conduct an Initial Community Assessment;
- (2) Organize and implement the direct participant stakeholder panel; and

- (3) **Communicate with Commentors and the General Public as the Project progresses.**

The issues of concern and opinions held by people in the community, especially community leaders and residents adjacent to the Site, were identified through a series of community interviews. Interviews were conducted by Ann Green Communications, Inc., from January 1998 through March 1998. Fifteen community leaders and neighbors of the Site were interviewed. The purpose of the interviews was to:

- **Identify key issues of concern pertaining to the idle Fairmont Coke Works;**
- **Identify community needs;**
- **Learn whether there are perceived environmental and/or health concerns related to the Site; and**
- **Solicit nominations of individuals to be invited to participate in the direct participant stakeholder panel.**

The completion of this first phase of the stakeholder involvement process is an indication of Exxon's commitment to an open process of communicating with stakeholders and to gaining their input. The following information regarding formulation of the stakeholder process and continuing stakeholder involvement can be found in the following appendices to this FPA: Appendix II. - List of Fairmont Community Liaison Panel Direct Participants, Appendix III. - Detail on Stakeholder Involvement to Date on the Project and Announcements For December 3, 1998 Fairmont Community Liaison Panel Meeting, Appendix IV. - Minutes of the December 3, 1998 Fairmont Community Liaison Panel Meeting and Appendix V. - FPA Newspaper Questionnaire, Tri-fold Mailer, And Media Advisory/Release.

Exxon developed and completed a plan to reach stakeholders in the

community for the purpose of establishing a direct participant stakeholder panel. The interviews from the Initial Community Assessment were used to develop a preliminary stakeholder group. A meeting between Exxon, USEPA and WVDEP was held on May 21, 1998 to discuss the composition of the preliminary stakeholder group, and to establish operating principles for the group. As a result of this meeting, a public availability session was hosted by the USEPA, WVDEP and Exxon in Fairmont on June 16, 1998 to disseminate information about the project to the community, answer questions, and to solicit public involvement as direct participants in the stakeholder panel. Following review and consideration of the community input obtained at this session, USEPA, WVDEP and Exxon reached a mutual agreement on the composition of the direct participants for the stakeholder panel. The panel includes a cross-section of interests, including community, business, environmental and local government. The communication phase of Exxon's stakeholder involvement process will continue throughout the active project life.

Following announcements in the local news media, the first meeting of this stakeholder panel, designated the Fairmont Community Liaison Panel (FCLP), was held in Fairmont on June 30, 1998. The principal objective of this meeting was to formally announce the direct participants on the panel; review the objectives of the stakeholder panel; further orient the panel members, commentators and the interested public; disseminate background information about the site; and discuss future activities. All meetings of the Fairmont Community Liaison Panel will be open to the general public. Exxon's facilitation consultant, Ann Green Communications, Inc., will handle meeting logistics and facilitate all meetings. Initial input suggests that meetings will be held in the evening to encourage citizen attendance. It is likely the work group model used in other XL projects

may be appropriate in this situation. A work group would be a smaller segment of the full panel, which is formed to address a specific issue. Minutes will be kept for each meeting of the full panel. Minutes of work group sessions will be kept only where necessary to report specific actions or conclusions. All full panel meeting minutes, as well as supporting technical documents, will be made available at the designated public repository, the Fairmont Public Library.

3.2 Proposal Development

During the Proposal Development phase for Project XL, Exxon obtained significant input from members of the USEPA Region III, WVDEP and EPA headquarters. The input of the Fairmont community obtained during the public availability session and Fairmont Community Liaison Panel kickoff meeting was also incorporated into this proposal. In particular, the desire of the Fairmont community to complete this project in an expeditious fashion in order to return the Site to a economically productive use is a principal factor for the use of the Project XL approach at this Site.

3.3 Project Development

This Project is currently in the Project Development phase. Exxon has used the Fairmont Community Liaison Panel as a resource in its preparation of the draft FPA and to facilitate broad public comment on the Fairmont XL Project. Building on past XL projects, the Fairmont XL Project is following a four phase model to develop the FPA. This process is designed to facilitate understanding by the stakeholders and provides the opportunity for the public and stakeholders (i.e., USEPA, WVDEP, Exxon) to craft the FPA incrementally, seeing its formation clearly over the four phases.

Phase One: Develop FPA Concepts

During the first phase, the essential concepts that underlie the FPA were reviewed and developed with the FCLP .

Phase Two: Establish the FPA Elements

Once the basic concepts were established, the process moved toward development of individual FPA elements. Each element was crafted separately before being integrated in Phase Three.

Phase Three: Assembling the FPA

Phase Three was the integration of all the individual elements of the FPA into the first rough draft of the full FPA. This allows the FCLP, the public, and other interested parties to view the project elements as an entire package. The draft FPA was circulated to the FCLP on March 4, 1999.

Phase Four: Preparing the Draft FPA

While a draft of the full FPA is prepared in Phase Three, it is a rough draft designed primarily to allow stakeholders to view the elements as an entire package. In Phase Four, the comprehensive FPA draft will be prepared.

4.0 Innovation/Multi-Media Pollution Prevention

The Stakeholder Process identified in Section 3.0 of this Appendix, provides an innovative approach to community involvement. Also, Exxons' commitment to work toward redevelopment of the Site is an innovative approach for Superfund cleanups that provides the benefit of returning the property to a beneficial use. Although the use of non-time critical removal actions at Superfund sites is not a

new approach, it is still innovative due to the regulatory alternatives/efficiencies it affords. Such alternatives/efficiencies allow for the development and use of innovative strategies for achieving regulatory requirements during the characterization and remediation of the Site. In the case of the Fairmont Coke Works site, the non-time critical removal action approach and associated regulatory alternatives/efficiencies will result in a more rapid progression through the site characterization, selection of a response action and remediation phases, and the application of realistic risk assessment methodologies without compromising the technical aspects of the program. As a result, it is currently estimated that remediation of the Site could be completed within 50% of the time, usually required for Superfund sites. This reduction in remediation time will result in a decreased time for the potential mitigation of any existing on-site sources of contamination, thus reducing the potential for any further cross-media contamination (e.g., contamination of ground water and/or surface water by soil contaminants).

Utilization of the additional regulatory alternatives currently applied to Superfund sites by the USEPA Region III will also permit the development of innovative strategies, as needed.

5.0 Transferability

The Fairmont XL Project would be a pilot program for Exxon, the EPA and WVDEP to demonstrate concepts in the Superfund program that are currently being considered, developed, and/or implemented in other regulatory programs

and jurisdictions. Once established, these demonstrated alternatives could be transferable, under certain circumstances, to other Superfund sites. Since this project will be one of the first, if not the first, Superfund site remediation project conducted under Project XL, it will provide significant insight into how future Superfund projects could be conducted within the Project XL framework.

The lessons learned in the establishment and involvement of a stakeholder group (i.e., Fairmont Community Liaison Panel) in the overall decision making process and cleanup of the Site will also be of value to other Superfund site remediations. The involvement of Exxon and advisory groups in determining potential re-development options for the Site early in the cleanup process will also provide additional lessons transferable to other Superfund sites. Exxon's efforts in facilitating the redevelopment of the Site after cleanup have the potential for broad applicability in the Superfund remediation process.

6.0 Feasibility

The tasks proposed for the Expanded Site Investigation of the Site would utilize standard field and analytical technologies for this line of work. It is also anticipated that any cleanup of the Site that is necessary will use presumptive remedies or other proven remedial technologies. Thus, performance of this project is technically feasible. Since non-time critical removal actions have been used previously at Superfund sites, the use of this approach for the Fairmont Coke Works site is administratively feasible. Due to its position as one of the world's largest energy and petrochemical companies, Exxon has the capability, personnel and resources to conduct the program as proposed.

Other factors that make this project especially feasible are:

- Progress of Exxon's stakeholder involvement process, including upfront work to facilitate early establishment of the Direct Participant Stakeholder Panel;
- Existence of only one PRP with an Administrative Order for this Site;
- Exxon's financial, technical, and public relations resources;
- Exxon's ownership/site control;
- Desire on Exxon's, EPA's, and stakeholders' part to make this work as a demonstration project;
- Experienced and competent Exxon Team, including its contractors; and
- The desires of the community to quickly return the property to productive and beneficial economic use.

7.0 Monitoring, Reporting And Evaluation

The Final Project Agreement includes specific monitoring, reporting and evaluation criteria which are incorporated by reference from the EE/CA Order into Section 5.8 of the FPA. Exxon recognizes that communication of information about the project to stakeholders is also an especially important component of monitoring and evaluating an XL project. Updates of the technical activities and project progress/status will also be given at the meetings of the Fairmont Community Liaison Panel (currently held monthly in Fairmont). These and other communications media, including the Internet, will be considered under Project XL to communicate information about the Project to stakeholders.

8.0 Shifting Of Risk Burden

The Fairmont XL Project is consistent with Executive Order 12898. The overall goals of all the activities proposed by Exxon for the Site are to (a) eliminate any potential onsite sources of contamination where necessary and technically feasible, (b) ensure the structural and functional integrity of the existing landfill

and impoundment areas, and (c) mitigate any future migration of contaminants through ground water and/or surface water, where an unacceptable risk to human health and/or the environment exists. Thus, no disproportionate environmental burdens to any of the communities surrounding the Site will occur as a result of participation in Project XL.

Fairmont Community Liaison Panel

Fairmont, West Virginia

Master Member List

Community Members:

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**DIFFERENCES BETWEEN EPA REGION III DATA VALIDATION AND
PROPOSED DATA USABILITY ASSESSMENT**

1. **Differences in the report format exist between EPA Region III's Data Validation and Exxon's proposed DUA. EPA Region III's Data Validation report consists of a comprehensive narrative summarizing all quality control issues into three categories (Major Issues, Minor Issues, and Notes) and several appendices; Appendix A - Glossary of Data Qualifier Codes, Appendix B - Data Summary Forms, Appendix C - Results as Reported by the Laboratory for all Target Compounds, Appendix D - Reviewed and Accepted Tentatively Identified Compounds, and Appendix F - Supporting Documentation. The DUA report includes an overall summary, data usability assessment worksheets, and data summary tables . The overall summary addresses the acceptability of the data and issues associated with its accuracy, precision, sensitivity, and representativeness. Any issues that affect the technical usability of the data are included in the overall summary. The data usability assessment worksheets are manually completed during the data package review. All quality control accedences are noted on the worksheets with the associated data qualification actions. Together, the overall summary,**

the data usability assessment worksheets, and the data summary tables are equivalent in content to Region III's comprehensive Data Validation narrative, Appendix A, and Appendix B. To streamline the reporting process, Appendices C, D, and F are not included as part of the DUA report, since all the information included in these appendices is already contained in the data packages, which are available for reference if necessary.

2. For EPA Region III data validations, the qualifiers "L" and "K" are used for estimated data with a determinable low or high bias, and the "J" qualifier is used for estimated data when the bias cannot be determined. In contrast, but consistent with EPA's National Functional Guidelines for Data Validation, the proposed DUA uses only the "J" qualifier for estimated data whether or not the bias is determined. When the bias can be determined, it is noted in the overall summary.
3. EPA Region III's Data Validation requires an extensive review of the raw and reported data to verify the accuracy of the reported results. In contrast to the proposed DUA, EPA is requiring that ten¹ of twenty samples per parameter

¹ The DUA proposes that one sample per parameter per Sample Delivery Group be verified (recalculated).

type per Sample Delivery Group (SDG) of the raw and reported data be reviewed to check for transcription and calculation accuracy. If errors are noted, a more detailed review of other samples included in that SDG is performed. If no transcription and/or calculation errors are identified, and based on an overall review of the data package, the data are assumed to be correctly reported by the laboratory. This assumption is based on the knowledge that the data are directly uploaded from the instrument data system to the data reporting system, thus minimizing the potential for calculation errors. If this assumption were to be incorrect, the outcome would be the reporting of false positive results.

4. In the proposed DUA, the initial calibration results are reviewed for contractual compliance. Although the DUA proposed that results will be qualified if calibration compounds grossly exceed the % relative standard deviation (RSD) criteria ($>90\%$) or if response factors do not meet the minimum response factor criterion of 0.05, EPA is requiring compliance with EPA Region III's Data Validation for qualification of any positive result associated with an initial calibration compound that exceeds a 30% RSD.

To minimize the qualification of data, the data reviewer has an option to

eliminate either the high or low point of the calibration curve to restore the % RSD to less than or equal to 30%. For further guidance, please refer to pages 10 & 47 of the Region III Data Validation Guidelines (see attached).

5. In the proposed DUA, the continuing calibration results are reviewed for contractual compliance. The DUA proposes that results are qualified if calibration compounds grossly exceed the % difference criterion (>90%) or if response factors do not meet the minimum response factor criterion of 0.05 and continuing calibration calculations are not reproduced. However, EPA is requiring compliance with EPA's National Functional Guidelines for Organic Data Review which requires qualification of any positive result associated with a continuing calibration compound that exceeds a 25% difference.
6. If a compound is detected in a method, trip or field blank, EPA Region III's Data Validation qualifies the associated sample results with a "B" qualifier if the concentration of the sample result is less than 10 times the blank concentration for common laboratory contaminants or less than 5 times the blank concentration for all other compounds. In the proposed DUA, a "U" qualifier is used in place of the "B" qualifier. Results that are within 10 times the blank level for common laboratory contaminants and 5 times the blank

level for all other compounds are negated (qualified with a "U"). If the result is below the Contractor Required Quantitation Limit (CRQL), the result is removed and replaced with the CRQL and qualified with a "U".

The overall summary and the data usability worksheets indicate which samples and compounds are qualified for reasons of blank contamination.

This approach to blank actions is consistent with EPA's National Functional Guidelines for Data Validation.

7. Tentatively Identified Compounds (TICs) are not reviewed in the DUA except to note whether the TICs were correctly reported by the laboratory.

APPENDIX VI

DIFFERENCES BETWEEN EPA REGION III DATA VALIDATION AND PROPOSED DATA USABILITY ASSESSMENT

1. Differences in the report format exist between EPA Region III's Data Validation and Exxon's proposed DUA. EPA Region III's Data Validation report consists of a comprehensive narrative summarizing all quality control issues into three categories (Major Issues, Minor Issues, and Notes) and several appendices; Appendix A - Glossary of Data Qualifier Codes, Appendix B - Data Summary Forms, Appendix C - Results as Reported by the Laboratory for all Target Compounds, Appendix D - Reviewed and Accepted Tentatively Identified Compounds, and Appendix F - Supporting Documentation. The DUA report includes an overall summary, data usability assessment worksheets, and data summary tables . The overall summary addresses the acceptability of the data and issues associated with its accuracy, precision, sensitivity, and representativeness. Any issues that affect the technical usability of the data are included in the overall summary. The data usability assessment worksheets are manually completed during the data

package review. All quality control accedences are noted on the worksheets with the associated data qualification actions. Together, the overall summary, the data usability assessment worksheets, and the data summary tables are equivalent in content to Region III's comprehensive Data Validation narrative, Appendix A, and Appendix B. To streamline the reporting process, Appendices C, D, and F are not included as part of the DUA report, since all the information included in these appendices is already contained in the data packages, which are available for reference if necessary.

2. For EPA Region III data validations, the qualifiers "L" and "K" are used for estimated data with a determinable low or high bias, and the "J" qualifier is used for estimated data when the bias cannot be determined. In contrast, but consistent with EPA's National Functional Guidelines for Data Validation, the proposed DUA uses only the "J" qualifier for estimated data whether or not the bias is determined. When the bias can be determined, it is noted in the overall summary.
3. EPA Region III's Data Validation requires an extensive review of the raw and reported data to verify the accuracy of the reported results. In contrast to the

proposed DUA, EPA is requiring that ten² of twenty samples per parameter type per Sample Delivery Group (SDG) of the raw and reported data be reviewed to check for transcription and calculation accuracy. If errors are noted, a more detailed review of other samples included in that SDG is performed. If no transcription and/or calculation errors are identified, and based on an overall review of the data package, the data are assumed to be correctly reported by the laboratory. This assumption is based on the knowledge that the data are directly uploaded from the instrument data system to the data reporting system, thus minimizing the potential for calculation errors. If this assumption were to be incorrect, the outcome would be the reporting of false positive results.

4. In the proposed DUA, the initial calibration results are reviewed for contractual compliance. Although the DUA proposed that results will be qualified if calibration compounds grossly exceed the % relative standard deviation (RSD) criteria (>90%) or if response factors do not meet the minimum response factor criterion of 0.05, EPA is requiring compliance with EPA Region III's Data Validation for qualification of any positive result associated with an initial calibration compound that exceeds a 30% RSD.

² The DUA proposes that one sample per parameter per Sample Delivery Group be verified (recalculated).

To minimize the qualification of data, the data reviewer has an option to eliminate either the high or low point of the calibration curve to restore the % RSD to less than or equal to 30%. For further guidance, please refer to pages 10 & 47 of the Region III Data Validation Guidelines (see attached).

5. In the proposed DUA, the continuing calibration results are reviewed for contractual compliance. The DUA proposes that results are qualified if calibration compounds grossly exceed the % difference criterion (>90%) or if response factors do not meet the minimum response factor criterion of 0.05 and continuing calibration calculations are not reproduced. However, EPA is requiring compliance with EPA's National Functional Guidelines for Organic Data Review which requires qualification of any positive result associated with a continuing calibration compound that exceeds a 25% difference.
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the blank level for common laboratory contaminants and 5 times the blank level for all other compounds are negated (qualified with a "U"). If the result is below the Contractor Required Quantitation Limit (CRQL), the result is removed and replaced with the CRQL and qualified with a "U". The overall summary and the data usability worksheets indicate which samples and compounds are qualified for reasons of blank contamination. This approach to blank actions is consistent with EPA's National Functional Guidelines for Data Validation.

7. Tentatively Identified Compounds (TICs) are not reviewed in the DUA except to note whether the TICs were correctly reported by the laboratory.

J. Beginning thirty (30) calendar days from the effective date of this Order and every thirty (30) calendar days thereafter, or such longer interval as may be determined in writing by the EPA Project Coordinator designated pursuant to Section IX, and until EPA advises Respondent that the Work is complete, the Respondent shall provide EPA with a written progress report for each preceding 30-day period or, if applicable, the period specified in writing by the EPA Project Coordinator. In special circumstances when extensive work is being performed by the Respondent, the EPA Project Coordinator may require Respondent to provide progress reports for an interval as frequently as every 14 days. EPA shall provide Respondent with written notice that progress reports must be submitted at intervals less than 30 days. The progress reports shall include, at a minimum:

1. A description of the actions that have been taken toward achieving compliance with this Consent Order;
2. A description of all data anticipated and activities scheduled for the next 30 calendar days or if applicable, the period specified in writing by the EPA Project Coordinator;
3. A description of any problems encountered or anticipated;
4. Any actions taken to prevent or mitigate such problems;
5. A schedule for when such actions will be completed;

6. Copies of all analytical data received during the reporting period; ~~and~~
7. All modifications to any EE/CA submittal and schedule made in accordance with Section XVIII to this Consent Order during the reporting period; and
8. A complete account of all Project XL related activities that have occurred in the previous month and those Project XL activities anticipated for the coming month.